Università di Pavia Computer Engineering

Web and Multimedia Technologies - Project Report

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Project title (website subject) Cignoli Automotive Group (website for the amministrators of the Cignoli Automative Group)	
HTML version HTML5	
Server-side technologies used	
Apache (XAMPP), MySQL (Workbench), javascript, php	

Website content description

LOGIN PAGE

On this page, you'll find the following elements:

At the top, there's the title of the page ("Cignoli Automotive Group login page") along with an image depicting a lock. Beneath this, there's a form where users must enter their username and password. If either field is left blank or incorrect, a pop-up error will appear. Following the form, there's a login button. Next, there's a brief description of what users can do on the website.

Towards the bottom of the page, there are sentences regarding copyright, along with three links:

- The first link directs users to a page discussing the Privacy Policy (Politica sulla privacy).
- The second link is related to the contacts page and opening hours.
- The last link initiates the download of an SQL file associated with the database.

Additionally, when the administrator is logged in, a navbar appears on every page of the website, containing links to other pages such as Home, Associazione, Proprietario, Concessionaria, Automobile, Statistiche, and Logout.

HOME PAGE

At the top of this page, there is the navbar.

Secondly, there are some pieces of text in the center part of the page that talk about the main objectives of the company, along with the company's vision, interspersed with images showcasing our branches. Finally, there is the same footer that I explained previously.

ASSOCIAZIONE PAGE

The main focus of this page is to help users see more easily what is inside the company database. In fact, on this page, we always see the navbar at the top, and below the navbar, there is a title that describes the focus of the page.

Following that, there is a table showing what is inside the database table "Associazione" through a query executed by the server.

Additionally, an important feature of the page is a module that helps the administrator search for keys more rapidly. It provides live suggestions as the administrator types.

Lastly, there is always the same footer.

PROPRIETARIO PAGE

In this page, below the navbar, there is a title that explains the purpose of the page.

Following that, there is an image depicting a salesman and a woman who has purchased a car at one of the possible Cignoli Automotive branches.

Furthermore, beneath the image, there is a table displaying the database table "filiali". Here, we can find data about branch ownership, such as the "codice fiscale", the name and surname of the boss, the date of birth, the email, and the correlation between them and the Associazione table. Finally, there is the footer.

CONCESSIONARIA PAGE

In this page, after and below the navbar, there is a page title and a large centered image showcasing one of the Cignoli Automotive group branches in the foreground.

Following that, in the middle of the page, there is a table displaying data about the related dealerships. It includes the PI, the name of the dealership, its belonging group, and the CF related to the Proprietario table.

Afterwards, we can see the footer.

AUTOMOBILE PAGE

In this page, after and below the navbar, there is a page title and a large centered image depicting the interior of one of the Cignoli Automotive group branches.

Following that, there is the largest table on the website where the administrator can view the cars and their relevant information present in the company database.

Finally, we can see the footer.

STATISTICHE PAGE

This is the most important page of the website because here, the administrator can view the statistics about cars sold.

At first glance, there is the title, followed by three different reports, one after the other. Each report includes an image representing the graph and accompanying text that explains what the user can see.

The first report discusses the "Sales Analysis from 2000 to 2024." This is also the title of the report, and on the left side, there is an image displaying a column chart, with explanatory text on the right side. The second report is titled "Analysis of Sales in Italy by Brand (2000 - 2012)." Following this title, there is another image on the right side of the page, showing a different type of column chart. Corresponding explanatory text is positioned on the left side of the page. The last report focuses on the "Analysis of Sales in Italy by Brand (2013 - 2023)." Similar to the previous reports, the image (graph) is positioned on the right side, with accompanying text on the left side. LOGOUT Finally, clicking on the logout option does not lead to a separate page. Instead, it redirects the user back to the login page.

Technical description of the website

FOLDERS:

My project folder start from here: "C:\xampp\htdocs\cignoli-V11". Moreover, there are 2 more subdirectories that I had created in the origin: "C:\xampp\htdocs\cignoli-V11\web\cignoli-V10". After that, there are 6 subdirectories where the project is divided.

The first first folder, respect to my ordinamentaty, is: "/asset", where there are all of the .png or .jpg image that I used in my website.

The second folder is: "/javascript", here there is a javascript file (.js) that is used by the server to do some functions.

The third folder is: "/model" and there are all the .php files that help me to establish dbms connection, authentication function for the login and other 4 php file that are used to estract information from the database. In addition, there is a sub-folder called "/suggerimenti" that contain a .php file that is used to do an important feature in the Associazione web-page.

The fourth folder is: "/sql", there is the sql file (.sql) used for my website

The fifth folder is: "/stile", where there is my CSS file (.css) that contain all the information regarding the style for all pages.

The last folder is: "/view", is the biggest folder because it contains all the html file, sush as: the navbar, the header, the body, the footer, other 3 single pages and also four sub-folders called: "/viewAssociazione", "/viewAutomobile", "/viewConcessionaria", "/viewProprietarioConcessionaria", where each of them contains a single php file that is used to get and show the database tables.

HTML STRUCTURE OF THE PAGES:

At the first glance, every page of my website is structured as the following, starting from the top there is the header, the navbar and them never change. After there is the body, that occupy most of the page and it change according to the web-pages and finally there is the footer that is always the same, like the header.

Apertura.html (header):

This file is the header used and linked in every web-page, excluded the login page. In this file there is the head part that contain the link to the CSS.

Navigazione.html (navbar):

This file contains a navbar class where inside it there is a list and each contain a link to a specific page of the website. The links are: Home, Associazione, Proprietario, Concessionaria, Automobile, Statistiche, Logout. Everything is connected to a external CSS file.

Documentazione.html (body of the Home page):

In this document there a alternate sequence of <h3>, and <div> (for images) tag.

In short, there are some titles associated to a brief text and few images. This is the content of the body and is all of those contents is positioned in the center of the page, one down the others.

Chiusura.html (footer):

This html page is dedicated to the footer that is present in every single page of the website.

Here, we can find <head> tag with a link to the CSS and the footer. Moreover, inside this last part there is a copyright symbol with the name of the company and lots of other words. In addition, there is a very short non ordered list (<ul/li> tag) with 3 links.

- The first link (<u>privacy.html</u>), there is a very rudimental page that show a classic page related to the privacy of the Automotive Group.
- The second link (<u>contatti.html</u>), it refer to a page that contain only the contact and the time schedule of the Cignoli Automotive Group.
- The last is a button that, when is clicked, launch the download to the sql file where there is inside all the DB schema used for the website.

Modulo login.html:

This is the file that contain the content displayed in the login page.

Starting from the top, there is the same <div> tag for the image that I used in others page of the web. So, it used the same style properties reported in the CSS file.

Secondly there is a form action that contain div and inside it there are 2 text labels used for the Username and the Password. Thirdly, there is a login button that do two option: if the Username and Password are correct open the home page, if not, shows a Error pop-up message and reload the login page.

Associazione-automobile-Concessionaria-Proprietario page:

These pages use the same style but not common style. Start from there is a that explain the focus of the page. After that, there is a <div class=""> used for the image representation.

Finally, there is a tag that report the table that is inside the database. Each table is different but use the same CSS and it is form by <tr/th> tag. This table is extract through a php code (that I will discuss later).

Only in the Associazione page, there is, after the table, another title followed by a table and a label text input. When the user writes even just a letter, suggestions are shown to make it easier to search for some words in the table.

CSS

<u>body</u>: This selector defines the basic styles for the entire page body. It sets the height to 100% of the viewport, uses flex layout with a column direction, sets the base font to Arial or a sans-serif font, and sets the background to a light gray color with black text.

<u>a</u>: This selector defines the basic styles for links. It sets the text color of links to blue (#007bff), removes the underline from links, and adds an underline when hovering over links.

<u>header</u>: This selector defines the styles for the page header. It sets the background to a dark gray color (#333), the text to white, and aligns the text center.

<u>section</u>: This selector defines the styles for sections of the page. It sets a flexible layout and flexibility to adapt to available space.

.flex-container: This selector defines the styles for flexible containers used within the page. It sets a flex layout with a column direction, aligns items center vertically, and sets margins.

<u>h2</u>, <u>h3</u>: These selectors define the styles for second and third-level headings. They set the text color to blue (#007bff) and specify margins for spacing.

<u>p</u>: This selector defines the styles for paragraphs. It justifies the text, sets a maximum width, and adds margins for spacing.

<u>img</u>: This selector defines the styles for images. It makes them responsive and adds margins above and below.

<u>footer</u>: This selector defines the styles for the footer of the page. It sets the background to dark gray, the text to white, and aligns the text center. It also sets internal padding for spacing.

<u>.footer-content</u>: This selector defines the styles for content within the footer, specifying the maximum width and automatic margins.

<u>.button</u>: This selector defines the styles for buttons present on the page. It sets the background to blue (#007bff), the text to white, adds padding and rounded borders for a clean style and appealing appearance. The cursor is changed to a pointer on hover, and a hover effect is added to change the background color.

.<u>navbar</u>: This selector defines the styles for the navigation bar on the page. It sets the background to dark gray (#333) and specifies hidden overflow to manage content overflowing from the navigation bar.

JAVASCRIPT:

The provided JavaScript code implements the 'suggerisci_info_associazione' function, which is called when a user enters text into an input field. The function makes an AJAX request to retrieve suggestions associated with the entered text. When the text is changed, the function sends a GET request to the server with the entered text as a parameter (q). When the server response arrives successfully (status 200), the code updates the content of an HTML element (a div with id "sug_associazione") with the received suggestions.

Additionally, there is the 'cambiacf' function which is called when a suggestion is selected. This function sets the value of an input field ("scf") to the value of the selected suggestion and clears the HTML element displaying the suggestions.

In summary, the JavaScript code is used to provide dynamic suggestions to the user as they type in the input field, enhancing the user experience without the need to reload the entire page.

SERVER-SIDE TECHNOLOGIES:

Azioni connessione.php: this PHP file code establishes a connection with a MySQL database. It defines two functions: 'connessione_al_db', which sets up the connection using server name, username, password, and database name. If the connection fails, it terminates with an error message and returns the MySQL connection object. 'disconnettimi' closes the MySQL database connection. These functions handle database connectivity, crucial for web application interaction.

Visualizza tuple associazione.php: this PHP code within the HTML is responsible for fetching data from a database and dynamically populating a table with the retrieved data. It utilizes a 'while' loop to iterate over

the fetched data and generates table rows (``) with table data (``) for each row of data fetched from the database. The PHP code inside the loop echoes out the values of each field in the database table to be displayed within the table cells. This dynamic population of the table allows for the display of varying amounts of data from the database without the need to manually code each table row.	
I want only to report this file, because in the others folder related to Automobile, Concessionaria, Proprietario, there are a similar file that do the same function but with different parameters.	